

REMARKS

This amendment is in response to the final Office action (Paper No. 20061031) mailed on the 17th of November 2006. Re-examination and reconsideration are respectfully requested.

Attached to this Amendment is a PTO-1449 form in which seven (7) patent references cited in a non-final Office action mailed on 27 July 2006 for Cannon et al. (US 2001/0029187) are listed.

Listing of the Claims

Pursuant to 37 CFR §121(c), the claim listing, including the text of the claims, will serve to replace all prior versions of the claims, in this application.

Status of the Claims

Claims 1 through 23 are pending in this application. Claims 5 and 6 are amended in compliance with the Examiner's kind suggestion.

Amendment of the drawings

FIGS. 3 and 6 are amended as follows:

- in FIG. 3, in step S110, "fixation device" is amended to read "fixed device"; and
- in FIG. 6, in step S210, "fixation device" is amended to read "fixed device", and in step S214, "processing" is amended to read "generation".

I. Rejection of claims 5 and 6 under 35 U.S.C. §112

On page 2, in the fourth paragraph of the Office action (Paper No. 20061031), the Examiner rejected claims 5 and 6 under the second paragraph of 35 U.S.C §112 “as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite the limitation ‘the distance measurer’”. The Examiner asserted that there is insufficient antecedent basis for this limitation in the claim, and suggested that these claim to read ‘the distance gauge’ to be consistent with the amendment of claim 1”.

In conformance with the Examiner’s requirement, “the distance measurer” in claims 5 and 6 are changed to “the distance gauge”. Accordingly, the rejection under the second paragraph of 35 U.S.C. §112 is moot, and should be withdrawn.

II. Rejection of claims 1 through 5 under 35 U.S.C. §102(b) as being anticipated by Cannon et al. (US 2001/0029187)

On page 2, last paragraph of the Office action (Paper No. 20061031), the Examiner rejected claims 1 through 5 under 35 U.S.C. §102(b) as being anticipated by Cannon et al. (US 2001/0029187). For the reasons stated below, it is submitted that the invention recited in the claims 1 through 5 is not anticipated by the prior art cited by the Examiner.

II-1 In support of this rejection, Paper No. 20061031 states that Cannon ‘187 “teaches”a:

“detector providing an indication of electric field strength of a *ring receiving generation control signal* when the *ring receiving generation control signal* is received form [*sic*, “from”] a fixed device after a *ring signal* is received (figure 1, paragraphs 0020-0022, wireless handset (109) detects the RSSI of a user initiated paging

signal between the base station)”

This statement from Cannon ‘187 is fantasy.

First, Cannon ‘187 nowhere uses either of Applicant’s art recognized nomenclature *ring receiving generation control signal* or a *ring signal*. How may Cannon ‘187 be said to anticipate an apparatus responding to a specific signal by generating a particular signal if Cannon ‘187 not only fails to describe either of these signals, but instead teaches other and different signals?

Second, nowhere does Cannon ‘187 suggest Applicant’s “providing an indication of electric field strength of a *ring receiving generation control signal* when the *ring receiving generation control signal* is received from [sic, “from”] a fixed device after a *ring signal* is received”? In point of fact, Cannon ‘187 depends upon a user to “initiate a page function, such as by pressing a particular key of the keypad.”¹ In contradistinction, and as is explained by Applicant’s original specification, “[t]he ring signal detector detects a ring signal received from a local line, and supplies the detected ring receiving detection signal to the system controller.”² In short, Cannon ‘187’s *paging function* is structurally, functionally and operationally different from Claim 1’s *ring receiving generation control signal* and is structurally, functionally and operationally different from Claim 1’s *ring signal*. Moreover, Cannon ‘187 teaches a *paging function* that produces but a single *paging signal*; that single, user initiated *paging signal* may not be said to anticipate either Claim 1’s *ring signal* or claim 1’s *ring receiving generation control signal*. Furthermore, Cannon ‘187’s single *paging signal* may not be said to anticipate both Claim 1’s *ring signal* and claim 1’s *ring receiving*

¹ Cannon ‘187, page 2, left column, line 2.

² Original specification, [0011], page 3.

generation control signal.

Despite the thorough reading of Cannon '187, the exact language of Applicant's claim 1 is absent. The completeness mandated by 37 C.F.R. §1.104(a)(b) and (c) is not provided by the Examiner's explanation of Cannon '187. Clarification is respectfully requested. By way of example, the Examiner is respectfully requested to explain precisely which portion of Cannon '187 teaches "when the ***ring receiving generation control signal*** is received from [sic, "from"] a fixed device after a ***ring signal*** is received." Additionally, the Examiner is also requested to identify precisely where Cannon '187 teaches any "a ***ring receiving generation control signal*** when the ***ring receiving generation control signal*** is received from a fixed device after a ***ring signal*** is received." The Examiner's citation of Figure 1 and paragraphs [0020] through [0022] of Cannon '187 simply discuss a user initiated "paging signal", which does not disclose any external signal received over a fixed wire by the fixed device. Moreover, and as previously noted, Cannon '187 nowhere uses the term "ring signal"; in effect, the Examiner has mislabeled the structure of Cannon '187 in an effort to demonstrate anticipation. Under 35 U.S.C. § 102(b), it is error to assume that two structures are the same or equivalent simply even if those two structures perform the same function. The Federal Circuit has held it error to assume that two structures are the same or equivalent simply because they can arguably be said to perform the same function.³ *Roton Barrier, Inc. v. Stanley Works*, 79 F.3d

³ The Examiner's attempt to equate Cannon '187's ***paging signal*** with either Applicant's ***ring signal*** or with Applicant's ***ring receiving generation control signal***, and the Examiner's endeavor to equate Cannon '187's solitary ***received signal strength/estimated distance*** to both Applicant's ***distance*** and with Applicant's ***reference distance*** is unusual in view of the starkly different meaning ascribed by the U.S. Patent & Trademark Office to Cannon '187's use and mean of these identical terms ***paging signal*** and ***received signal strength/estimated distance*** in Paper No.

1112, 1126-27 (Fed. Cir. 1996); *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 934 (Fed. Cir. 1987) (en banc) (“Pennwalt erroneously argues that, if an accused structure performs the function required by the claim, it is *per se* structurally equivalent”), *cert. denied*, 485 U.S. 961 (1988). Infringement (or anticipation) is found only if the claimed function is performed by either the same structure (or acts) that the specification describes or else by an equivalent of the structure (or acts). *Texas Instruments Inc. v. United States Int’l Trade Comm’n*, 805 F.2d 1558, 1562, 231 USPQ 833, 834-35 (Fed. Cir. 1986).

Accordingly, this rejection is improper under the all elements rule. Given these and other deficiencies in Cannon ‘187, there is no statutory basis for maintaining this rejection of claims 1 through 5. It withdrawal is respectfully urged.

II-2. The present invention generally relates to an apparatus that selectively generates a calling tone for a portable device in a wire/wireless telephone on the basis of distance between the portable device and a fixed device. The portable device gauges the distance by detecting the electric field strength of a ring receiving generation control signal received from the fixed device after a ring signal is received, and compares the detected electric field strength values with preset field strength values that correspond to the distance values between the portable device and the fixed device. See, for example, the following paragraphs in Applicant’s original specification:

- page 26, paragraph 0112, lines 17-18, “(The system controller 34) measures the distance to the fixed device 100 by comparing the converted digital signal with a value preset in the storage 306”;

02 issued on the 27th of July 2006 in Serial No. 09/880.151 of Joseph M. Cannon (*i.e.*, the same U.S. patent application as Cannon ‘187). A copy of Paper No. 02 is made of record here via Applicant’s annexed *Information Disclosure Statement*.

- page 27, paragraph 0115, lines 12-14, “a distance value to the fixed device 100 in accordance with an electric field strength value can be stored in a table by the calling tone generating control signal received from the fixed device 100”;
- page 29, paragraph 0129, lines 16-18, “Namely, the system controller 304 compares the RSSI detected in the RSSI detector 303 with a reference RSSI prestored in the storage 306, and determines the distance between the fixed device 100 and the portable device 300”.

In addition, the portable device compares the gauged distance value with a preset reference distance value input by the user, disables generation of the calling tone when the measured distance is less than the preset reference distance value, or generates the calling tone when the measured distance is not less than the preset reference distance. See the cited paragraphs:

- Page 10, paragraph 0047, lines 11-14, “The controller controls disabling of the generation of the melody sound when the distance measured by the distance measurer is less than the preset reference distance, and generates the melody sound when the measured distance is not less than the preset reference distance”;
- Pages 11-12, paragraph 0051, line 21 in page 11 and lines 1-2 in page 12, “If the user selects the manual mode through the key input unit, the controller compares the distance measured by the distance measurer with the reference distance reset by the user through the manual mode, and controls generation of the melody sound for the received ring according to the comparison result”.

Therefore the user may locate the portable device without hearing unpleasant calling tones owing to the different calling tones from the fixed device and the portable device.

A thorough reading of Cannon et al. '187 discloses a cordless telephone including a page adjustment mechanism to affect an alerting signal output to locate a misplaced handset, wherein the page adjustment mechanism is based on user control or a condition, such as received signal strength, or ambient noise.

The pending claims are patentably distinguishable from Cannon et al. '187 because present invention selectively generates a calling tone according to a ring receiving generation control signal

that is received from a fixed device after a ring signal has been received; Cannon '187 however, adjusts a paging signal according to a paging initiation that is set by a user. In addition, the present invention includes a key input unit for applying a reference distance, and the calling tone is generated if the distance between the fixed device and the portable device is more than the reference distance, or disabled if the distance is less than the reference distance.

II-2. Claim 1

II-2-1. Regarding claim 1, on page 3, in the fourth paragraph of the Office action (Paper No. 20061031), the Examiner stated that Cannon et al. '187 teaches “a detector providing an indication of electric field strength of a ring receiving generation control signal when the ring receiving generation control signal is received from a fixed device after a ring signal is received (figure 1, paragraphs 0020-0022, wireless handset (109) detects the RSSI of a user initiated paging signal between the base station)”. The Applicant respectfully traverses.

According to MPEP 707.07(f), on page 700-123:

- “Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant’s argument and answer the substance of it”.

The Applicant respectfully traverse the rejection in Paper No. 20061031, since the Examiner ignores the Applicant’s arguments filed on August 28th, 2006 regarding the first Office Action in Paper No. 20060526.

As argued by the Applicant on August 28th, 2006, although Cannon et al. '187 teaches detecting the RSSI of a user initiated paging signal, the user initiated paging signal of Cannon et al. '187 does not correspond to the ring receiving generation control signal in the present application.

Whereas the user initiated paging signal is merely initiated by a user input in order to locate the misplaced handset in Cannon et al. '187, the ring receiving generation control signal in the present invention is initiated by a received ring signal. In other words, Cannon et al. '187 merely discloses detecting the signal strength of the particular signal initiated by a user input. In contrast, claim 1 defines detecting electric field strength of a ring receiving generation control signal received from a fixed device after a ring signal is received. There is no Applicant's "ring receiving generation control signal" found in Cannon et al. '187. In short, Cannon et al. '187 teaches a manually triggered paging signal to address a different problem in the art; consequently, there is no prima facie demonstration of anticipation under 35 U.S.C. §102(b).

II-2-2. Regarding claim 1, on page 3, in the sixth paragraph of the Office action (Paper No. 20061031), the Examiner stated that Cannon et al. '187 teaches "a controller controlling generation of a melody sound for a received ring according to a comparison between the representation of the distance and a reference distance (paragraphs 0023, 0027 and 0028, adjusting the alerting signal level, volume, pitch, cadence or any combination based on the received signal strength/estimated distance between the handset and fixed base station with respect to a measured value from a register)". The Applicant respectfully traverses.

A review of the cited paragraphs of Cannon et al. '187 reveals that whereas Cannon et al. '187 discloses adjusting the signal characteristics, for example, volume, duration, pitch, cadence or any combination of these, there is no disclosure about controlling generation of a melody sound according to a comparison result. In other words, Cannon et al. '187 fails to teach enabling the generation of a melody sound when the measured distance is more than a reference distance, and

disabling the generation of the melody sound when the measured distance is larger than the reference distance. In contrast, claim 1 expressly discloses that the apparatus controls the generation of a melody sound, that is, disabling the generation of the melody sound when the measured distance is less than the preset reference distance and generating the melody sound when the measured distance is more than the preset reference distance. Therefore, the apparatus as claimed in claim 1 is patentably distinguishable from Cannon et al. '187.

II-3. Claim 2

Regarding claim 1, on page 3, in the sixth paragraph of the Office action (Paper No. 20061031), the Examiner stated that Cannon et al. '187 teaches “the distance gauge includes a comparator for comparing the indication of the electric field strength detected by the detector means to a plurality of preset electric field strength values corresponding to distance values between the portable device and the fixed device (paragraph 0028-0030, handset measures strength of the particular signal with comparison to values in a register to adjust the alert)”. The Applicant respectfully traverses.

The Applicant respectfully asks the Examiner to note that the Applicant's apparatus, as claimed in claims 1 through 5, controls the generation of a calling tone based on two comparison results:

- (1) comparing a detected electric field strength to preset electric field strength values to gauge a distance between the fixed device and the portable device;
- (2) comparing the gauged distance between a reference distance to control the generation of the calling tone.

The first comparison is performed by using the comparator included in the distance gauge as claimed in claim 2, while the second comparison is performed by using the controller as claimed in claim 1.

The comparison disclosed by Cannon et al. '187 is merely for adjusting the alerting signal.

See the cited paragraphs in Cannon et al. '187:

- page 3, paragraph 0028, lines 1-3, “read a measure value from a register therein and adjust the alerting signal accordingly”;
- page 3, paragraph 0030, lines 15-20, “will also measure the strength of the particular signal (or some other characteristic thereof--such as comparing the time of receipt to a time stamp thereon) and adjust the alerting signal based on this measure”.

The adjusting the alerting signal of Cannon et al. '187 does not corresponds to the measurement of the distance performed by the comparator in the distance gauge as claimed in claim 2. Nowhere does Cannon et al. '187 teach or suggest comparing the detected electric field strength to preset electric field strength values to gauge a distance. Therefore, the comparator as claimed in claim 2 is patentably distinguishable from Cannon et al. '187.

II-4. Claims 3 and 4

Regarding claims 3 and 4, on page 4, in the second paragraph of the Office action (Paper No. 20061031), the Examiner stated that Cannon et al. '187 teaches “storage means for storing the preset electric field strength values and distance values corresponding to the electric field strength values (paragraphs 0026 and 0028, general use of a register to hold data for processor manipulation of the adjusting mechanism)”. The Applicant respectfully traverses.

Again, the Applicant respectfully asks the Examiner to note that the Applicant's apparatus, as claimed in claims 1 through 5, controls the generation of a calling tone based on two comparison results:

- (1) comparing a detected electric field strength to preset electric field strength values to gauge a distance between the fixed device and the portable device;
- (2) comparing the gauged distance between a reference distance to control the generation of the calling tone.

The first comparison is performed by using the comparator included in the distance gauge as claimed in claim 2, while the second comparison is performed by using the controller as claimed in claim 1. In the first comparison step, the comparator compares the detected electric field strength with a plurality of preset electric field strength values stored in the storage means as claimed in claims 3 and 4.

In paragraph 0026 of Cannon et al. '187 as cited by the Examiner, Cannon et al. '187 merely discloses storing a measured value (i.e., a result of the measurement) in a register. See the cited paragraphs:

- page 2, paragraph 0026, lines 38-41, “It is, of course, possible for the measure to have been made prior to the receipt of the paging signal and stored, for example, in a register”; and
- page 3, paragraph 0028, lines 1-3, “read a measure value from a register therein and adjust the alerting signal accordingly”.

Nowhere does Cannon et al. '187 teach or suggest storing preset values for the measurement. On the other hand, the present application claims storage means in claims 3 and 4 for storing preset electric field strength values and distance values for the comparison performed by the comparator in the distance gauge. Therefore, the storage means as claimed in claim 2 is patentably distinguishable from Cannon et al. '187.

II-5. Claim 5

Regarding claim 5, on page 4, in the third paragraph of the Office action (Paper No. 20061031), the Examiner stated that Cannon et al. '187 teaches "display means for displaying a ring receiving message corresponding to a receiving message display control signal generated in the controller means regardless of the distance measured by the distance measurer (paragraphs 0018 and 0019, a display to indicate call activity is inherent to typical devices employed for the call function)". The Applicant respectfully traverses.

Firstly, the Applicant respectfully asks the Examiner to show evidence indicating that a display to indicate call activity is inherent to typical devices employed for the call function.

Secondly, nowhere does Cannon et al. '187 teach or suggest that the display means in the present application display the ring receiving message regardless of the distance measured by the distance gauge. Therefore, the display means as claimed in claim 5 is patentably distinguishable from Cannon et al. '187.

In view of the foregoing amendments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. If there are any questions, the examiner is asked to contact the applicant's attorney.

No fee is incurred by this Amendment.

Respectfully submitted,



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